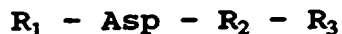


ABSTRACT OF THE DISCLOSURE

There is disclosed an isolated polypeptide and derivatives thereof having protease biological activity for human precursor IL-1 β and for a substrate comprising:



wherein R_1 and R_3 are independently any D or L isomer amino acid, R_2 is Ala or Gly, and wherein the specific protease cleavage site is between Asp and R_2 . Inhibitor compounds, compositions and methods for inhibiting Interleukin 1 β protease activity are also disclosed. The inhibitor compounds comprise an amino acid sequence of from 1 to about 5 amino acids having an N-terminal blocking group and a C-terminal Asp residue connected to an electronegative leaving group, wherein the amino acid sequence corresponds to the sequence Ala-Tyr-Val-His-Asp.